EPA Science Forum 2008 – Innovative Technologies: Key to Environmental and Economic Progress
Ronald Reagan Building and International Trade Center, Washington, DC, May 20-22, 2008

Preliminary Agenda

(Subject to change – Last updated 5/9/08)

Tuesday, May 20, 2008

	Opening Plenary
9:30 AM – 9:35 AM	*Opening Remarks* – Sally Gutierrez, Director, NRMRL, EPA
9:35 AM – 9:45 AM	*Welcome and Introductions* – George Gray, Assistant Administrator, ORD, EPA
9:45 AM – 9:55 AM	*Perspectives on Technology and Environmental Progress* – John Howard, Jr., Chair, EPA's National Advisory Council for Environmental Policy and Technology
9:55 AM – 10:00 AM	*Role of the Agency's Senior Environmental Technology Officer (SETO)* – Jeff Heimerman, Interim SETO, EPA
10:00 AM – 10:20 AM	*Opening Keynote* – Nicholas Parker, Chairman and Managing Partner, Cleantech Group, LLC
10:20 AM – 10:30 AM	*Break*
10:30 AM – 10:45 AM	*EPA Commitment to Environmental and Economic Progress through Science, Research and Technology* – Marcus Peacock, EPA Deputy Administrator (invited)
10:45 AM – 11:45 AM	*Keynote – The Cradle to Cradle Revolution* – William McDonough, Founding Partner and Principal, William McDonough + Partners
11:45 AM – 11:55 AM	Question and Answer Period
11:55 AM – 12:00 PM	Closing Remarks – George Gray, Assistant Administrator, ORD, EPA
12:00 PM – 1:00 PM	*Lunch (on your own)*

	Track A **Technology Advances and Future Directions**	**Track B** **Energy, Climate and the Environment**	**Track C** **Water Systems Infrastructure and Security**
Session 1	New Technologies for EPA Environmental Technology Council Priorities Session Chair – Maggie Theroux, EPA/ORD	Evaluating Biofuels Impacts through Lifecycle Assessments Session Chairs – Sarah Dunham, EPA/OAR and Andy Miller, EPA/ORD	Panel Discussion: Sustainable Water Infrastructure: What Is It and How Do We Achieve It? Session Chair – Jim Goodrich, EPA/ORD
1:00 PM – 3:00 PM	(1:00) *Portable Imaging Devices for Industrial Leak Detection at Petroleum Refineries and Chemical Plants* – David J. Williams, EPA/ORD/NERL (1:25) *Lead Paint Poisonings: How Can Innovative Technology Make a Difference?* – Maggie Theroux, EPA/ORD/NRMRL (1:50) *Pesticide Spray Drift Reduction Technologies: A Collaborative Effort to Enhance Environmental and Public Health Protection* – Norman Birchfield, EPA/ORD/OSA (2:15) *Decontamination Technologies Promoting the Sustainable Use of Contaminated Sediments with Beneficial Use and their Applications to other Waste-Related Materials* – Eric Stern, EPA/Region 2 (2:40) Questions/Discussion	(1:00) *Introduction of Panel Topic* – Sarah Dunham, EPA/OAR (1:15) *EPA's Biofuel Strategy* – Alan Hecht, EPA/ORD (1:45) *Latest Development in Biofuel Life Cycle GHG Analysis for the Energy Independence and Security Act* _ Vincent Camobreco, EPA (2:15) *Evaluating Regional-Level Impacts of Biofuel Production* – Brenda Groskinsky, EPA/Region 7 and Tim Johnson, EPA/ORD/NRMRL (2:45) Questions/Discussion	(1:00) *Sustainable Infrastructure for Water and Wastewater* – Andy Crossland, EPA/OW/OWM (1:20) *Aging Water Infrastructure Research Program* – Daniel Murray, Jr., EPA/ORD/NRMRL/WSWRD (1:40) *Perspectives on Innovative Technology: The Energy/Water Infrastructure Nexus* – Andy Paterson, ECONERGY International (2:00) *Monitoring the Future – The Future of Monitoring* – Michael Metcalf, TELEDYNE ISCO (2:20) Discussion
3:00 PM – 3:30 PM	*Break*		
Session 2	Advances in Air Monitoring Technologies Session Chairs – Edward Washburn, EPA/ORD and David McCabe, AAAS Fellow at EPA	Air Quality and Water Quality / Climate Change Interactions Session Chairs – ST Rao, EPA/ORD/NERL and Dale Evarts, EPA/OAR/OAQPS	Characterization, Maintenance, and Management of Drinking Water Distribution and Wastewater Collection Systems Session Chair – Dan Murray, EPA/ORD
3:30 PM – 5:30 PM	(3:30) *Session Overview* – David McCabe, AAAS Fellow at EPA (3:35) *Global Perspective on Air Monitoring Technologies* – Jack Fishman, NASA Langley Research Center (3:55) *Continental Perspective on Air Monitoring Technologies* – Phil Dickerson, EPA/OAR/OAQPS (4:15) *State/Regional Perspective on Air Monitoring Technologies* – Charlie Pietarinen, New Jersey DEP (4:35) *Local/Emissions Perspective on Air Monitoring Technologies* – Eben Thoma, EPA/ORD/NRMRL (4:55) *Integrated Air Monitoring Technologies: Application of Satellite Aerosol Optical Depth and Airborne Lidar Data for Monitoring Fine Particulate Formation and Transport in San Joaquin Valley, California* – Rebecca Rosen, EPA/Region 9 (5:15) Questions/Discussion	(3:30) *Investigating Interactions Between Climate and Air Quality* – ST Rao, EPA/ORD/NERL (4:00) *Air Quality and Climate Change: Policy Implications of the Science* – Dale Evarts, EPA/OAR/OAQPS (4:30) *ORD Research on Water Resource Adaptation to Climate Change* – James Goodrich, EPA/ORD/NRMRL (5:00) *National Water Program Draft Climate Change Strategy* – Jeff Peterson, EPA/OW	(3:30) *Condition Assessment of Drinking Water Transmission and Distribution Systems* – Michael Royer, EPA/ORD/NRMRL/WSWRD (4:00) *Condition Assessment of Wastewater Collection Systems* – Christopher Feeney, The Louis Berger Group (4:30) *Rehabilitation of Wastewater Collection and Water Distribution Systems* – Ray Sterling, Trenchless Technology Center, Louisiana Tech University (5:00) *Advanced Concepts for Urban Wet-Weather Flow Management* – Thomas O'Connor, EPA/ORD/NRMRL/WSWRD and Charles Rowney, ACR, LLC
5:30 PM – 8:00 PM	*Technology Expo Session and Reception*		

Wednesday, May 21, 2008

	Track A Technology Advances and Future Directions	Track B Energy, Climate and the Environment	Track C Water Systems Infrastructure and Security	Track D Facilitating Technology Development and Commercialization through Partnerships
Session 3	Advances in Water/Soil Monitoring Technologies Session Chair – Amy Dindal, Battelle	Greenhouse Gas Emission Assessments Session Chairs – Reid Harvey, EPA/OAR and Joe DeCarolis, EPA/ORD	Innovative Approaches for the Determination of Chemical, Biological and Physical Integrity of Drinking Water and Wastewater Pipes Session Chair – Mark Rodgers, EPA/ORD	Setting the Stage for Sustainable Water Technology in the United States Session Chair – Sally Gutierrez, EPA/ORD/NRMRL
8:30 AM – 10:30 AM	(8:30) *Collaborative USCG/EPA Evaluation of Ballast Water Exchange Screening Tools under the EPA ETV Program* – Gail Roderick, U.S. Coast Guard Research & Development Center (9:00) *Current and Emerging Technologies for Evaluation of Recreational Water Quality Monitoring* – Stephen Weisberg, Southern California Coastal Water Research Project (9:30) *The Potential of New Water Sensor Technology Networks and a Pilot Implementation at a* CAFO – Michael Brody, EPA/OCFO (9:40) *Implementation of Triad Approach for Effective Soil Monitoring* – Deana Crumbling, EPA/OSWER (10:05) *Innovative Screening Technologies for Dioxins in Soil* – Stephen Billets, EPA/ORD/NERL	(8:30) *U.S. GHG Emissions and Trends* – Leif Hockstad, EPA/OAR (8:45) *Global Emissions and Capacity Building Efforts to Improve GHG Inventories in Developing Countries* – Mausami Desai, EPA/OAR (9:00) *Tools Designed to Assist in Developing GHG Inventories for Agriculture and Land-Use Change and Forestry Sectors* – Tom Wirth, EPA/OAR/OAP/CCD (9:10) *Quantification of GHG Emissions* – Arlyn Andrews, National Oceanic and Atmospheric Administration (9:30) Questions/Discussion	(8:30) *Vacuum Flushing of Sewer Solids* – Mary Stinson, EPA/ORD/NRMRL (9:00) *The Role of Biofilms in Drinking Water Exposure to Potentially Pathogenic Legionella spp.* – Helen Lau, EPA/ORD/NERL (9:30) *Metagenomic Analysis of Distribution System Bacterial Communities* – Randy Revetta, EPA (10:00) *Lead and Copper Corrosion* – Darren Lytle, EPA	(8:30) *Introduction* – Sally Gutierrez, EPA/ORD/NRMRL (8:35) *The Role of Science and Technology in EPA's Water Mission* – Audrey Levine, EPA/ORD (invited) (8:55) *Cultivating Public Education and Demand for Sustainable Water* – Adam Krantz, National Association of Clean Water Agencies / Clean Water America Alliance (9:15) *The Science and Technology Effort in Drinking Water* – Robert Renner, Awwa Research Foundation (9:35) *The Science and Technology Effort in Clean Water* – Glenn Reinhart, Water Environment Research Foundation (invited) (9:55) *Emerging Science and Technology and the Next Revolution in Water* – Mark Shannon, Center of Advanced Materials for Purification of Water with Systems / University of Illinois at Urbana-Champaign (10:15) Questions/Discussion
10:30 AM – 11:00 AM	*Break*			
	Plenary Session on Climate Change			
11:00 AM – 11:30 AM	Details on this presentation will be posted soon.			
11:30 AM – 12:00 PM	Robert Varney, Regional Administrator, EPA Region 1			
12:00 PM – 1:00 PM	*Lunch (on your own)*			

	Track A **Technology Advances and Future Directions**	**Track B** **Energy, Climate and the Environment**	**Track C** **Water Systems Infrastructure and Security**	**Track D** **Facilitating Technology Development and Commercialization through Partnerships**
Session 4	Green Building Research Needs and the Promise of New Technology Session Chair – Ken Sandler, EPA/OAR	Greenhouse Gas Technology Evaluation and Scenario Analysis and Integrated Assessment Session Chairs – Frank Princiotta, EPA/ORD and Francisco Delachesnaye, EPA/OAR	Real-World Technology Verifications Session Chair – Tom Speth, EPA/ORD	Technology Advice to EPA – Who Gives It, How, and With What Effect Session Chair – George Gray, EPA/ORD
1:00 PM – 3:00 PM	(1:00) *A Quick Introduction to Green Building* – Ken Sandler, EPA/OAR (1:05) *The National Green Building Research Agenda* – Vivian Loftness, Carnegie Mellon University (invited) (1:30) *Stanford's Green Dorm Project: A Living Laboratory* – Jonas Ketterle, Stanford University (invited) (1:55) *The Green Building Studio and Accelerating Sustainable Building Design* – John Kennedy, Green Building Studio, Inc. (2:20) *EPA's Indoor Air Quality Research* – Bob Thompson, EPA (2:45) Questions/Discussion	(1:00) *Introduction of Panel Topic* – Frank Princiotta, EPA/ORD (1:10) *GHG Mitigation in Analyses of Congressional Climate Legislation* – Allen Fawcett, EPA (1:35) *Scenario Analysis and Integrated Assessment in the Latest Report from the Intergovernmental Panel on Climate Change* – Steven Rose, EPA (2:00) *The Potential Roles of Mitigation Technologies: Scenario and Sensitivity Analyses with MARKAL* – Dan Loughlin, EPA/ORD (2:25) *Accomplishments of Greenhouse Gas Environmental Technology Verification Center* – Tim Hansen, Southern Research Institute	(1:00) *Field Evaluation of Drinking Water Treatment Systems* – Craig Patterson, EPA (1:30) *ETV Verification for Drinking Water Treatment Systems* – Jeffrey Adams, EPA (2:00) *USEPA's Arsenic Demonstration Program* – Thomas Sorg, EPA (2:30) *Arsenic Demonstration Project: The New Hampshire Experience* – Cynthia Klevens, New Hampshire Department of Environmental Services	(1:00) *Insights, Recommendations, and Results – The Story of a NACEPT Subcommittee* – Phil Helgerson, NACEPT Subcommittee on Environmental Technology (1:20) *SAB Technology Advice: Past, Present, and Future* – David Dzombak, SAB Environmental Engineering Committee (1:40) *EFAB: Financing the Development and Deployment of Technology* – Michael Curley, EFAB (2:00) *Board of Scientific Counselors: Independent Advice and Guidance to ORD* – Gary Sayler, BOSC (2:20) *Technology Advice from the National Academies* – James Reisa, National Research Council (2:40) Questions/Discussion
3:00 PM – 3:30 PM	*Break*			

	Track A **Technology Advances and Future Directions**	**Track B** **Energy, Climate and the Environment**	**Track C** **Water Systems Infrastructure and Security**	**Track D** **Facilitating Technology Development and Commercialization through Partnerships**
Session 5	Clean Technologies and Decision Support Tools Session Chair – Michael Gonzalez, EPA/ORD	Regional Responses to Climate Change Session Chairs – Norm Willard, EPA New England and Joel Scheraga, EPA/ORD	Technology Development: From Concept to Commercialization Session Chair – Roy Haught, EPA/ORD	Venture Capital Investment in Environmental Technology – Recommendations from the NACEPT Report Session Chair – Phil Helgerson, NACEPT Subcommittee on Environmental Technology
3:30 PM – 5:30 PM	(3:30) *Life Cycle Assessment* – Ray Smith, EPA/ORD/NRMRL (3:55) *Clean Technologies through Process Intensification* – Larry Sullivan, Kreido Biofuels, Inc. (4:20) *Process Metrics for Chemical Reactions* – TBD (4:45) *Design for the Environment* – Richard Engler, EPA/OPPT (5:10) Questions/Discussion	(3:30) *EPA Region 10 Activities* – Joel Scheraga, EPA/ORD (4:00) *Northeast State Activities* – Gary Kleiman, NESCAUM (4:30) TBD (5:00) *EPA New England Activities & Activities of Local Government, Colleges & Universities, NGOs* – Norm Willard, EPA New England	(3:30) *Technology Development Concept to Commercialization through Achievement Opportunities via A Consortium of Historically Black Colleges and Universities & Hispanic-Serving Institutions* – Ron Highsmith, EM Federal Foundation (4:00) *Integrated Sample Preparation and Pathogen Detection Device for Application to the Analysis of Environmental and Drinking Waters* – Michael Dziewatkoski, Yellow Springs Instruments (4:30) *Upper Mississippi Early Warning Monitoring Network: A RARE Project* – William Franz, EPA/Region 5 (5:00) *Body Armor for Your Water* – Harold Harms, Harmsco Filtration Products	(3:30) *How Investing in Environmental and Clean Technologies Helps EPA Satisfy its Environmental and Public Health Responsibilities* – Hank Habicht, SAIL Venture Partners (3:50) *Commercializing Technologies from DOE Laboratories – Lessons for EPA* – Kef Kasdin, Battelle Ventures (4:10) *Metrics and Monitoring of Environmental Technologies* – Bryan Martel, Environmental Capital Group, LLC (4:30) *How an Active Investment Role Can Make EPA an "Environmental Improvement Agency"* – Eric McAfee, Cagan McAfee Capital Partners (4:50) *Markets, Opportunities, and Needs for Investment in Environmental Technology with EPA Support* – Chuck McDermott, RockPort Capital Partners (5:10) Questions/Discussion
5:30 PM to 7:30 PM	*Water Technology Development: Concept to Commercialization Reception – Sponsored by Harmsco Filtration Products, YSI, Inc. and Battelle (By invitation only)*			

Thursday, May 22, 2008

	Track A Technology Advances and Future Directions	Track B Energy, Climate and the Environment	Track C Water Systems Infrastructure and Security	Track D Facilitating Technology Development and Commercialization through Partnerships
Session 6	Developing Technology Markets to Reduce Diesel Engine Emissions Session Chairs – Mike Kosusko, EPA/ORD and Dennis Johnson, EPA/OTAQ	Energy Efficiency, Agency Voluntary Programs Session Chairs – Kathleen Hogan, EPA/OAR and Bob Thompson, EPA/ORD	Protection and Security of Water Infrastructure – Ongoing EPA Research Session Chair – Hiba Ernst, EPA/ORD/NHSRC	International Technologies Partnership Session Chair – Sally Gutierrez, EPA/ORD/NRMRL
8:30 AM – 10:30 AM	(8:30) *Introduction* – Michael Kosusko, EPA/ORD (8:35) *EPA-Supported Technology Development to Reduce Emissions and Fuel Use* – David Read, EPA/OTAQ (9:00) *One State's Support for NOx Control Technology Development and Use* – Rudy Smaling, Houston Advanced Research Center (9:25) *Developing Markets for Verified Retrofit Technologies* – Ken Adler, EPA SmartWay Program (invited) (9:50) *Secondary Business Opportunities Driven by the Diesel Retrofit Market* – Tom Balon, MJ Bradley & Associates (10:15) *Q&A* – Dennis Johnson, EPA/OTAQ	(8:30) *Energy Efficiency and Climate Change* – Kathleen Hogan, EPA/OPEI (9:00) *Energy Star* – Peter Banwell, EPA (9:30) *Reducing HVAC Loads* – Bob Thompson, EPA/ORD (9:40) *Clean Technology Initiative* – Kristen Taddonio (10:10) Questions/Discussion	(8:30) *Overview of Water Infrastructure and Security Research* – Kim Fox, EPA/ORD/NHSRC (9:00) *Integration Between Water Security Research and Implementation* – Tanya Mottley, EPA/OW/OGWDW (9:30) *NHSRC Research on Decontaminating Water Infrastructure Following Terrorist Attacks* – Scott Minamyer, EPA/ORD/NHSRC (10:00) *Threat Ensemble Vulnerability Assessment (TEVA) Sensor Placement Optimization Tool (SPOT) Software Tool* – Robert Janke, EPA/ORD/NHSRC	(8:30) *Introduction and Welcome* – Sally Gutierrez, EPA/ORD/NRMRL (8:35) *WHO Perspectives on Sustainable Sanitation: Self-Powering Wastewater Services with Fertilizer Production* – Nick Ashbolt, EPA/ORD/NERL (9:00) *European Union Environmental Technology Programs Exemplified by Projects in a Danish Research Institute* – Helle Weber Ravn, University of Aarhus, National Environmental Research Institute, Denmark (9:25) *The Importance of Global Partnerships in the Growth of Advanced Water Technologies and Innovation* – Michael Dimitriou, Jacobs Carter Burguess (9:50) *Applied Research and Technology Assessment as the Basis for Strategic Dialogue and Vision-Making Between the World Bank and Developing Countries on Waste Management* – Sandra Cointreau, The World Bank (10:15) Questions/Discussion
10:30 AM – 10:45 AM	*Break*			
	Plenary Session on Nanotechnology			
10:45 AM – 11:15 AM	*Greener Synthesis of Nanomaterials: Risk Reduction Strategies and Environmental Applications* – Rajender Varma, Senior Scientist, NRMRL, ORD, EPA			
11:15 AM – 11:45 AM	*Environmental Challenges and Opportunities in Nano-Manufacturing* – Farhang Shadman, Director, NSF/SRC Engineering Research Center for Environmentally Benign Semiconductor Manufacturing; Professor, Department of Chemical and Environmental Engineering, University of Arizona			

Session Descriptions

Technology Advances and Future Directions (Track A)

New Technologies for EPA Environmental Technology Council Priorities
Session Chair – Maggie Theroux, U.S. EPA / Office of Research and Development and Senior Environmental Technology Officer, U.S. EPA / Office of the Science Advisor

EPA's Senior Environmental Technology Officer will give a brief overview of the ten priority problems of the Agency-wide Environmental Technology Council (ETC) and the technologies that are being developed in response. After the overview, four ETC Action Team Leaders will discuss the progress of their teams and how they have partnered with other stakeholders to fund the development and demonstration of relevant, effective technologies. Some of the technologies that will be discussed are remote sensing for volatile organic compound (VOC) emissions and next generation lead paint and dust test kits.

Advances in Air Monitoring Technologies
Session Chair – Edward Washburn, U.S. EPA / Office of Research and Development and David McCabe, AAAS Fellow at EPA

Quality of air means quality of life, so scientists, decision-makers, and the public need accurate, rapid information about what is in the air we breathe. In this session you'll learn about the latest air monitoring technologies and the tools that bring that data to you. From your neighborhood ozone readings to global satellite measurements of particulate pollution, a wealth of information gives us our most complete picture of air quality yet. Technology increasingly allows us to protect air quality proactively using accurate air quality predictions. Learn how air monitoring technology helps EPA attack problems from regional ozone pollution to continental and global movement of persistent chemicals. Meanwhile, exciting new tools make observations and predictions more accessible to everyone. Join some of EPA's premier scientists to learn about air monitoring technology and appreciate how it improves the air we breathe.

Advances in Water/Soil Monitoring Technologies
Session Chair – Amy Dindal, Battelle

Accurate, timely, and cost-effective monitoring of water and soil matrices for environmental contaminants are key aspects of environmental protection. This session will include presentations that focus on innovative technologies for water and soil monitoring. Emphasis will be placed on monitoring technologies that might have significant regulatory, public health, or economic impacts.

Clean Technologies and Decision Support Tools
Session Chair – Michael Gonzalez, U.S. EPA / Office of Research and Development

Development and implementation of clean technologies provide opportunities to produce materials in a more environmentally-benign manner. Along with these technologies, methodologies and tools for technology evaluation yield insights into product and process design aspects that need improvement to achieve environmental benefits. This session will present examples of clean technologies and decision support / evaluation tools to produce materials and chemicals in a more sustainable manner. EPA may develop these tools through in-house research or through support of extramural research. Examples of technology evaluation tools to be presented are life cycle assessment and life cycle impact assessment.

Green Building Research Needs and the Promise of New Technology
Session Chair – Ken Sandler, U.S. EPA / Office of Air and Radiation

Green building is one of the most active and exciting sectors of the sustainability movement. But even as the market for green buildings and related products has been growing exponentially, it remains a tiny percentage of overall sales. To make green building mainstream will require a series of significant research breakthroughs to enable the profitable commercialization of critical technologies. In this session experts will discuss some of the most promising green building technologies, including some supported by EPA research. Opportunities for continued research will also be discussed. Needed

affordable technologies range from those that harvest and save energy and water to those that improve and maintain indoor air quality to materials that are recycled and recyclable – and ideally, technologies that accomplish multiple environmental goals simultaneously.

Developing Technology Markets to Reduce Diesel Engine Emissions
Session Chairs – Mike Kosusko, U.S. EPA / Office of Research and Development and Dennis Johnson, U.S. EPA / Office of Transportation and Air Quality

This session will show how EPA is working with manufacturers and states to develop opportunities for emerging technologies in the mobile source sectors. EPA's Environmental Technology Verification Program and the National Clean Diesel Campaign (NCDC) are demonstrating how cost-effective environmental benefits from innovative technologies and creative clean diesel programs are accelerating technology introduction. EPA is conducting efforts with the state of Texas to develop and verify nitrogen oxides (NOx) control technologies so that Houston, Dallas/Fort Worth, and other Texas cities can achieve their National Ambient Air Quality Standards goals for ozone and NOx. EPA has developed innovative technologies and in-house testing capabilities that can be used to evaluate and improve performance of a range of engines and fuels, including heavy duty hybrids. The public's potential exposure to air pollution near roadways is being assessed using state-of-the-art monitoring equipment.

Energy, Climate and the Environment **(Track B)**

Evaluating Biofuels Impacts through Lifecycle Assessments
Session Chairs – Sarah Dunham, U.S. EPA / Office of Air and Radiation and Andy Miller, U.S. EPA / Office of Research and Development

This session will cover key developments in the approach and use of lifecycle assessments to evaluate the impacts of biofuels on greenhouse gas emissions and other environmental impacts.

Air Quality and Water Quality / Climate Change Interactions
Session Chairs – ST Rao, U.S. EPA / Office of Research and Development and Dale Evarts, U.S. EPA / Office of Air and Radiation

This session will cover the potential impacts of global warming and associated global changes on air quality, water quality and water availability.

Greenhouse Gas Emission Assessments
Session Chairs – Reid Harvey, U.S. EPA / Office of Air and Radiation and Joe DeCarolis, U.S. EPA / Office of Research and Development

This session will present information on the characterization and quantification of greenhouse gas emissions for the key sectors for the United States.

Greenhouse Gas Technology Evaluation and Scenario Analysis and Integrated Assessment
Session Chairs – Frank Princiotta, U.S. EPA / Office of Research and Development and Francisco Delachesnaye, U.S. EPA / Office of Air and Radiation

This session will provide an assessment of key energy mitigation technologies and alternative technology scenario analysis at both national and regional levels, including long term projections, mitigation, and impacts.

Regional Responses to Climate Change
Session Chairs – Norm Willard, U.S. EPA New England and Joel Scheraga, U.S. EPA / Office of Research and Development

This session will describe regional, state and local responses to climate change.

Energy Efficiency, Agency Voluntary Programs
Session Chairs – Kathleen Hogan, U.S. EPA / Office of Air and Radiation and Bob Thompson, U.S. EPA / Office of Research and Development

This session will present the scope and status of EPA voluntary programs encouraging energy efficiency and greenhouse gas emission reduction, with a focus on the building and transportation sectors and non-CO2 emission reduction programs.

Water Systems Infrastructure and Security **(Track C)**

Panel Discussion: Sustainable Water Infrastructure: What Is It and How Do We Achieve It?
Session Chair – Jim Goodrich, U.S. EPA / Office of Research and Development

This panel session will present speakers representing a broad cross-section of drinking water, wastewater, industry, government, and business leaders focusing on closing the gap between infrastructure investment and provision of necessary water services for a sustainable future.

Characterization, Maintenance, and Management of Drinking Water Distribution and Collection Systems
Session Chair – Dan Murray, U.S. EPA / Office of Research and Development

This session will cover the EPA's new Aging Water Infrastructure Research Program that encompasses (1) technology to assess the Condition Assessment of infrastructure, (2) management and technical approaches for the optimal Repair, Replacement, or Rehabilitation of infrastructure, and (3) Advanced Engineering Concepts for future infrastructure networks.

Innovative Approaches for the Determination of Chemical, Biological, and Physical Integrity of Drinking Water and Wastewater Pipes
Session Chair – Mark Rodgers, U.S. EPA / Office of Research and Development

The goal of this session is to describe the high-tech and practical approaches for the characterization and assessment of the chemical, biological, and physical condition of the interior of drinking water and wastewater infrastructure.

Real-World Technology Verifications
Session Chair – Tom Speth, U.S. EPA / Office of Research and Development

This session includes examples of real-world verifications of cutting-edge drinking water, storm water and wastewater technologies as a result of EPA programs in collaboration with industry and academia.

Technology Development: From Concept to Commercialization
Session Chair – Roy Haught, U.S. EPA / Office of Research and Development

This session will highlight the collaborations between the EPA and private industry in bringing new ideas from the "garage" to the marketplace with presentations from the U.S. EPA / National Risk Management Research Laboratory / Regional Applied Research Effort (RARE) and Cooperative Research and Development Agreement (CRADA) partners.

Protection and Security of Water Infrastructure – Ongoing EPA Research
Session Chair – Hiba Ernst, U.S. EPA / Office of Research and Development / National Homeland Security Research Center

The U.S. EPA is the Sector Specific Agency (SSA) for homeland security related to drinking water and wastewater systems. The ORD's Water Infrastructure Protection Division (WIPD) has been charged with conducting the research necessary to prevent, detect and recover from terrorist's attacks on water systems. This session will focus on the ongoing research projects to assist the Office of Water's Water Security Division as it provides tools to the water industry for homeland security.

Facilitating Technology Development and Commercialization through Partnerships (Track D)

Technology Advice to EPA – Who Gives It, How, and With What Effect
Session Chair – George Gray, U.S. EPA / Office of Research and Development

There are various groups that EPA turns to or could turn to for advice on technology-related matters. A number of them are created under the Federal Advisory Committee Act (FACA), which ensures that they have balanced representation of all interested stakeholders. Among these groups are: the National Advisory Council for Environmental Policy and Technology (NACEPT), the Science Advisory Board (SAB), the Environmental Financial Advisory Board (EFAB), and the Board of Scientific Counselors (BOSC). Among the groups not affiliated with EPA that give EPA technology-related advice is the National Academies of Science and Engineering-National Research Council (NRC). As EPA elevates the importance of technology within the Agency, it is helpful to know what kinds of advice these groups give, how they give it, and with what effect. This is the basis for then examining whether there are ways to coordinate the work of these panels and to give EPA management guidance on when it is more appropriate to use one versus another of these groups for a particular type of technology issue.

Venture Capital Investment in Environmental Technology – Recommendations from the NACEPT Report
Session Chair – TBD

The April 2008 NACEPT report to the Administrator on "EPA and the Venture Capital Community: Building Bridges to Commercialize Technology" recommends actions that both EPA and the venture capital community can take to increase investment in the commercialization of environmental technologies over the long-term. A work group consisting of members of the NACEPT Subcommittee on Environmental Technology and outside members who are experts in the financing of environmental technology interviewed nine senior members of the venture capital industry whose companies invest in environmental technology. Some of the interviewees were former senior administrators of environmental agencies. In this session some of the interviewees will discuss the report's recommendations and explain why and how they think EPA and the venture capital community should be working together.